

built form design guidelines



For Landcom Projects



built form



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introduction

1.1 Purpose and reason for this document

This document contains Landcom's preferred guidelines for the design of detached homes on individual lots 12.5m x 30m and larger. It has been prepared because we are conscious of the importance of building well designed and sustainable homes in our new communities. Landcom actively encourages the good design of homes in our developments.

These guidelines have been developed to assist the Landcom development teams working with

builders and Councils in achieving well planned houses and gardens which respond to their site, orientation and climate.

The Landcom Built Form Guidelines are not intended to replace State or Council controls, including the NSW Housing Code, but rather seek to complement these other controls to produce quality housing.

1.2 Document Structure

The guidelines have been developed around 10 Key Principles outlined in Part 2. Each principle is explained and has 'Guidelines' listed which identify the required design outcomes relating to that principle.

To assist users of this document, a Checklist in Part 3 amalgamates all the Guidelines from each of the principles.

Photos are from a range of developments including some Landcom projects.



Hunterford



Simple shading and balcony details can add amenity and interest.



Quality features added to an otherwise simple house can improve its aesthetic value for a reasonable cost.

1.3 Who this document is for and how it should be used

This document has been written for Landcom development staff, our consultants and our partners within both the public and private sectors including Council planners and builders. It provides principles and guidelines for good practice housing design but is not a code and development staff and their consultants will of course have to take into account particular Local Council requirements. These guidelines may assist development staff and designers to justify departures from standards where we feel it is appropriate.

These Built Form Guidelines apply to free standing houses on individual lots generally with

a set back from each boundary but including those with a garage on a zero lot line where permitted. Attached and integrated houses have not been addressed in this document but may be the subject of future work.

This document is released as a working tool. To ensure it remains useful and relevant it will require feedback from users on how achievable the design objectives are in practice. Please give feedback to Landcom's Sustainability and Policy group.

Housing Styles

These guidelines are based around 10 Key Principles which apply to new houses regardless of their 'style'. The guidelines aim to improve the functional aspects of the home rather than suggesting a particular aesthetic outcome.



Contemporary homes at Rouse Hill demonstrate many of the principles outlined in these guidelines.



At Nelsons Ridge a corner house successfully addresses both streets.



Layering and detail added to the front facade can add amenity as well as improving the appearance of the house from the street.



Simple geometric forms, shade structures and a well designed fence are combined here to create a quality home that sits comfortably in the street.



Providing a separate path from the footpath on the street to the front door is an important safety and amenity feature.



More traditional housing forms which include a well proportioned and usable front porch present well to the street.

part 2

key principles



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FOR LANDCOM PROJECTS

Principle 1

Streetscape, Landscape & Fences

The landscape character of the street is created by well defined front gardens, street trees and the visibility of backyard trees beyond the house. The streetscape is a major contributor to the quality of the overall neighbourhood.

Corner lots homes are also significant as they provide landmarks and means of way-finding. (Refer to summary of corner lot guidelines on Page 22)

Front fencing, another key element of the street, should be designed to look like part of the street, rather than an extension of the dwelling.

Generous front verandahs and entry porches should be considered as additional outdoor living areas which also provide opportunities for residents to engage with passers-by.

Important Concepts

- Create attractive landscaped front gardens that include a number of small trees and low planting.
- The inclusion of a front fence is preferred so that a more useable front garden is created.
- Front fencing will clearly define the lot boundary, the street edge and the private space. This will help encourage use of the front garden as well as increasing surveillance and activation of the street.
- Larger trees in the backyard that can be seen from the street add a significant landscape quality to the street as well as to the garden.
- Letterboxes should be incorporated into the design of the front fence.
- The site plan should indicate the extent of hard and soft landscaping, tree size and locations.

Guidelines

- Front fences and front side fences (to 2m behind the front facade – see Fig 7.1 page 12) are to be:
 - 700 - 1200mm high
 - of 50% open appearance
- Front gardens to include at least 2 'small' trees (5m to 8m high at maturity).
- Rear gardens to include at least 1 'large' deciduous tree (8m to 15m at maturity).
- Lots 12.5m wide or more are to have at least 2 'large' deciduous trees in the rear garden.



An interesting streetscape is created by a combination of single and double storey homes of different yet compatible designs.

Principle 2

Garages & Driveways

In order to provide a diverse and attractive streetscape, the house facade should be dominant, with the garage a recessive element on the street elevation of the home.

Important Concepts

- Where site conditions allow, garages should be located to allow solar access to the private open space and internal living areas of the home. They should be located on the southern side of East-West facing lots, and the western side of North-South facing lots.
- The garage should be set back from the front facade and designed so that the entry and the house facade are the predominant features. A simple design for the garage door will reduce the visual impact of the garage.
- Reducing the width of the driveway at the street and incorporating landscape elements around parts of the driveway provides a more attractive and walkable street.

Guidelines

- Garage doors to be set back at least:
 - 1m from the front facade of the home
 - 5.5m from the front boundary.
- Garage doors to be:
 - less than 50% of the width of the house
 - no wider than 6m
 - maximum 2.4m high.
- Double garages are only permitted on lots 12.5m wide or greater.
- Single fronted tandem garages with one space behind the other are permitted.
- Triple garages are not permitted.
- Garages on corner lots should be accessed from the secondary street.
- Driveways to be a minimum of 1.5m from street trees.
- Provide landscaping between the driveway and the side fence.



A single garage door makes significantly less impact on the front facade of the house than a double one. It also allows a narrower driveway and a larger area of soft landscaping.



Setting back garages from the front facade reduces their visual impact on the streetscape.

Principle 3

Building Setbacks

Houses need adequate space between them to avoid the streetscape feeling overcrowded.

Providing adequate setbacks between houses also improves the character of the street and enhances diversity along the street elevation. These spaces are especially important at the upper level to maintain privacy and solar access.

Important Concepts

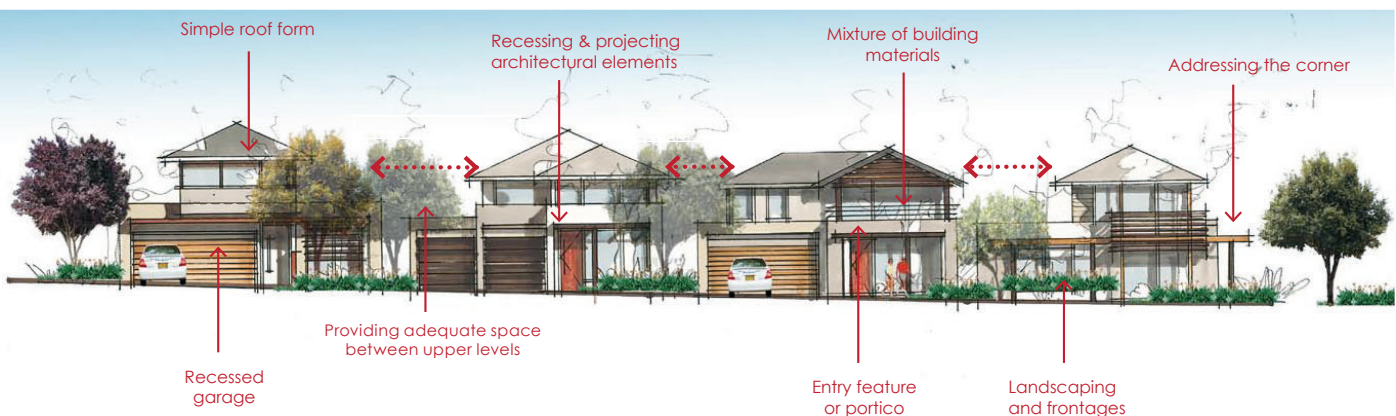
- Ensure the house is stepped back sufficiently from the side boundaries to reduce over shadowing.
- Where permissible, *zero lot lines* should be

located on the southern side of the lot, if possible, to allow maximum solar access to the living areas of the house.

- The upper level of the house should be adequately set back from the rear boundary to increase privacy, to accommodate large trees and often to improve solar access to the rear yard.
- On corner lots the house should address both streets.

Guidelines

- *Front facade* to be set back at least 4.5m from the front boundary.
- Garage to be set back at least 1m from the *front facade*.
- Lots 15m wide and over to have the upper floor set back at least 5.5m from the front boundary.
- Upper floor side facades to be set back to achieve at least 2.4m between neighbouring houses at that upper level. This increases privacy and natural light to both houses and decreases overshadowing.
- Set back house sufficiently from either the rear or side boundary to allow a 6m x 6m area for large trees. Setting back from the side boundary may be desirable to achieve optimum solar access.
- Rear setback for the remainder of the lot to be at least 2m from the rear boundary at the ground floor and 6m from the rear boundary at the upper level.
- Where permitted, buildings may be *zero lotted* on the ground floor along a side boundary for no more than 8m.
- For corner lot homes:
 - address both street frontages
 - on the secondary street frontage, set back the house at least 3m from that boundary for a maximum length of 9m then at least 4m after that
 - set back the front facade at least 2m from any point on the splayed corner boundary.



Space between houses, especially at the upper level, allows views to trees and sky beyond.

Principle 4

Site Coverage & Landscaped Area

A home should be sized and configured so there is sufficient spaciousness on the site to allow for a generous rear garden, a landscaped front garden and space between neighbours.

Bins and clothes drying areas should be located in the least visible position.

Important Concepts

- A house plan should sit comfortably on the chosen site by:
 - Orientating the home for optimum solar access and control, ideally with living areas to the north.
 - Addressing the street, with the house entry visible and clearly defined in built form.
 - Providing suitable and usable open spaces.
 - Retaining important natural features of the site and significant existing trees.
- Provide sufficient vehicle access and parking.
- Protect visual and acoustic privacy as well as solar access to the adjoining dwellings.
- Landscaped areas should be permeable to reduce storm water run off.
- Garbage storage areas should not be located in front of the front facade, and should be concealed from the street. This is especially important where lots have two street frontages. Where unavoidable, a timber battened screen with vine cover (or similar solution) may be used to reduce its visibility from the street.
- On corner lots the house entry should be located on the long side of the lot to avoid an extended blank side with little surveillance, and the corner should be addressed with either built form or landscaping.

Guidelines

- *Site coverage* for two storey homes to be a maximum of 50% of the total lot area.
- *Site coverage* for single storey homes to be a maximum of 60% of the total lot area.
- *Site coverage* and the footprint of the house should allow for:
 - *landscaped area* which gives permeability of the soil to limit stormwater run-off
 - diversity of built form
 - privacy for both residents and their neighbours.
- Bin storage and drying areas to be:
 - concealed from view from the street
 - considered carefully within the overall house and garden design
 - shown on the site plan.



A wrap around balcony and garden enables this corner house to address both streets.



Landscaping and covered outdoor spaces provide additional living space and help define the semi-private realm.

Principle 5

Solar Access & House Design

Well planned homes bring a feeling of spaciousness, sunlight and privacy to living. Design should incorporate outlooks toward landscaped areas, provide opportunities for natural breezes to circulate throughout and avoid 'wasted spaces'.

A house should be organised into zones, separating public living areas and more private bedroom and study areas.

Important Concepts

- Orientate living areas to the north, facing landscaped areas, where possible.
- Plan for several generously designed outdoor spaces, rather than them being 'left over' spaces around the dwelling.
- Provide quality solar access to internal and external living areas.

- Provide generous ceiling heights to allow sufficient daylight, increase feelings of spaciousness and to accommodate ceiling fans.
- Provide storage areas within houses and garages.

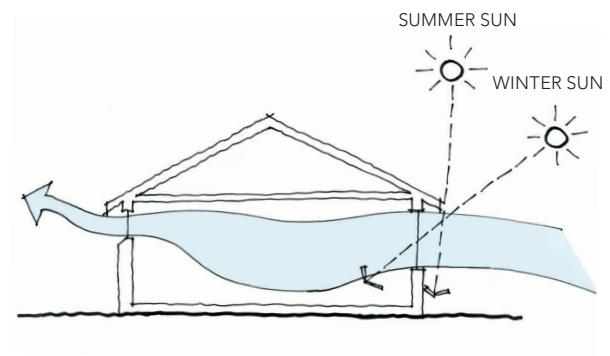


Fig 5.1 Provide cross ventilation with operable windows on opposite sides of the house

Guidelines

- Main living area to open directly onto the *private open space* via glazed double doors, to allow adequate sunlight and natural light into the house.
- The house is to be designed to have good natural cross ventilation with well considered placement of windows to draw breezes through the house.



Shading north and west facing windows can improve internal amenity and reduce heating and cooling costs.



Design courtyards to maximise winter sun access by facing them north where possible.

Principle 6

Private Open Space

A well-designed rear garden should be sized and shaped to create maximum usable *private open space*, and provide the opportunity for outdoor entertaining and recreation. The *private open space* should relate directly to the internal living area of the home.

The rear garden can also contribute to attractive streets by including large trees. In traditional streets the backyard trees add to the 'green and leafy' feel of the neighbourhood.

Important Concepts

- Rear yards should accommodate at least one large tree, 8m to 15m high at maturity, to establish a natural canopy above the site. Select deciduous trees that create shade in summer and allow in the winter sun.
- Rear yards should accommodate grassed areas, or open space with other soft, permeable ground cover, with good solar access.
- Shade tolerant species should be used in areas with reduced direct sunlight.
- Courtyards can be used to maximise the useability of available outdoor space. They also allow additional natural light and breezes into the house.
- Ideally, courtyards should be orientated to the north to maximise solar access and should incorporate appropriate shade devices.

Guidelines

- *Principle private open space* to be:
 - at least 4m x 6m
 - easily accessible from the main internal living area.
- At least half of the *principle private open space* should receive 3 hours or more of sunlight between 9am – 3pm on June 21.



Outdoor rooms are ideal in our temperate climate and provide versatile additional living space.



Decks and verandahs add to the usable area of a home and can be popular family entertainment areas.

Principle 7

Secondary Facades & Fencing

Side and Rear Facades

The sides and rear of a house are commonly considered less important than the street facade, yet are still viewed by neighbouring dwellings. Thus it is necessary to pay considered attention to their design and detailing.

Fencing

Side and rear fences are important in achieving privacy and security. They are also visible from many areas of the house.

Important Concepts

- Avoid excessively long expanses of blank upper level walls on all facades.
- Setting back the upper rear facade will provide more privacy inside and reduce overlooking of the neighbours house and rear garden.
- In certain orientations, this setback will also allow more sunlight into the rear garden.
- Consider all sides of the house when designing the facades, ensuring all facades include thoughtful articulation and attention to detail.

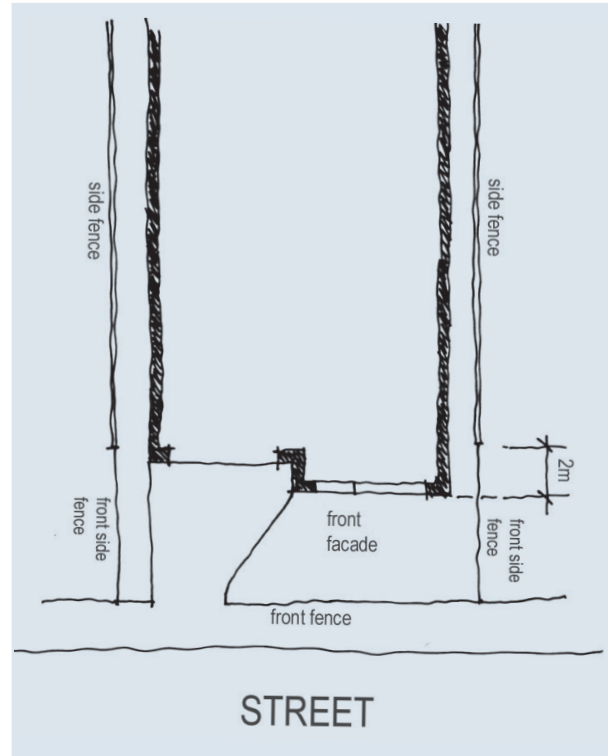


Fig 7.1 Front and side fence definitions



Attention should be paid to the design of the back facade as it is visible from the rear yard and often from the neighbouring houses as well.



Building materials should wrap around the corners of the house so they appear integral to the building rather than looking 'stuck onto' only the front facade.

Important Concepts continued

- Street facade materials should successfully 'turn the corner' by continuing to wrap around to the secondary facades.
- Front fencing should be constructed from predominantly lightweight materials, with the design allowing at least 50% openings.
- Fencing material finishes should be consistent with the character of the street.
- Front side fences to 2m back from the front facade should match the front fence in height and design. See Fig 7.1
- Side fences starting 2m back from front facade may be up to 1.8m in height.
- Alternatives to sheet metal fencing are required in order to maintain the desired overall character, except in bushfire prone areas.
- On the side boundaries of sloping sites fences should be stepped to ensure the height is no greater than 1.8m above ground level at any point. (Side fencing combined with retaining walls can otherwise result in excessively high walls and overshadowing for the lower side property).
- Cut or fill on any boundary should not be greater than 0.5m. This, combined with the neighbouring land, ensures no more than 1.0m maximum retaining wall on side and rear boundaries.

Guidelines

- Upper level walls longer than 10m to be stepped back a minimum of 1m.
- Side and rear fences to be a maximum of 1.8m high.
- Side fences to start at least 2m back from the *front facade* of the home, see Fig 7.1 pg 12.
- Metal sheet fencing is not permitted except where required to address bushfire issues.
- On corner lots the front fence should continue around the corner to the secondary street and along that street for a minimum of 30% of the lot length.
- On corner lots the 1.8m fence on the secondary street to be:
 - a maximum of 50% of the lot length
 - of a similar look and character as the front fence.



Rear facades generally adjoin the primary outdoor living spaces of the home. Their design should reflect this connection and contribute to the enjoyment of these spaces.



Side facades, especially, may benefit from screens to provide privacy between neighbours while still allowing larger openable windows for light and cross ventilation.

Principle 8

House Form, Roofs & Feature Elements

The quality of a residential community is supported by the built form, which should be of a coherent and appropriate character, with opportunities for diversity. Such diversity is achieved by combining single and double storey elements and including features such as entry porticos, balconies, terraces, pergolas and sun-shading devices.

Important Concepts

Porches and entries should:

- Create a clear and visible entry area which provides shelter for people entering the house. Ideally, the main entry for corner houses should be on the long side of the lot to avoid a 'blank' face to that street.
- Form an integral part of the dwelling.

Verandahs and pergolas should:

- Create a seamless link between internal and external living areas.
- Be provided to all elevations that are exposed to western and northern sun.
- Improve energy efficiency by shading windows.
- Appear as an extension of the house.
- Comprise of durable materials such as timber or metal.

Roof eaves should:

- Provide shading and weather protection to windows and doors.

Balconies and terraces should:

- Provide usable external living areas for upper levels of the home.
- Provide additional opportunities for outlook to the street and garden, improving safety by encouraging passive surveillance.

Sun shading

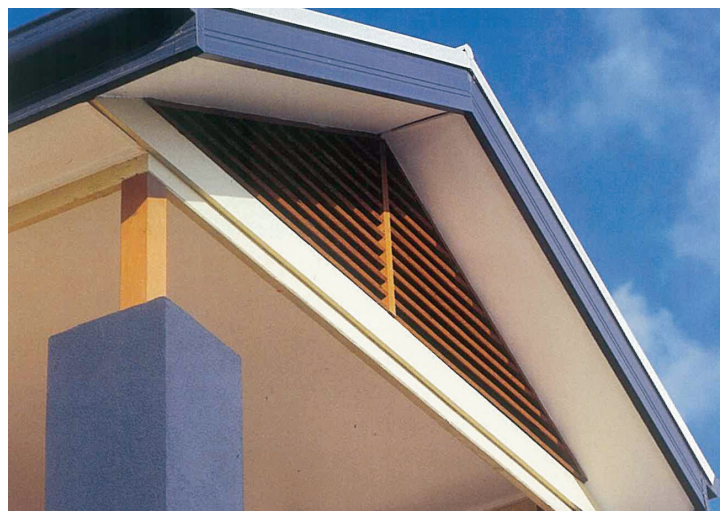
- Screens and awnings comprised of timber battens or metal frames are encouraged. They shade and protect openings, particularly on the northern and western elevations.

Materials and proportions

- Durability, detailing, appearance and diversity should be considered when selecting materials to ensure a high quality appearance over time.
- Variety and individuality are important, and considered materials selection creates a harmonious balance on the facades of the house.
- Well-balanced proportions are also important in improving the appearance of the dwelling, helping to relate various elements such as doors, windows and entries. Well proportioned elements on the facade of the building significantly improve its aesthetic value.



Generous verandahs provide additional living space as well as sheltering windows and doors from sun and rain.



Careful selection of materials and thoughtful detailing add to the quality of the home in the long term.

Facades and roofs

- While street trees and landscaped gardens create a consistent street character, built form adds diversity and interest.
- Flat parapet roofs need to be considered within the overall streetscape and need to relate harmoniously with the neighbouring buildings.
- Importantly, low-pitched roofs behind a parapet need to successfully integrate with the side and rear elevations.

Aerials and other clutter

- Elements of modern living including aerials, satellite dishes, water tanks, air conditioning units and solar hot water units should not be visible from the street or other public spaces.
- Careful attention is required to ensure optimum orientation for solar collectors, while avoiding the potential of such items being viewed as roof clutter from these areas.

Guidelines

- Eaves of at least 450mm (to the fascia) required on all pitched roofs except where roof portion is zero lotted. However, where practical, 600mm eaves should be considered to achieve an increased degree of shading to windows and for enhanced aesthetic appeal.
- Where flat roofs are proposed, alternative shading devices are required.
- Feature elements such as entries, verandahs and pergolas may extend beyond the *front facade* by a maximum of 2m.
- Provide a covered entry to the home at least 1.5m deep and clearly visible from the street.
- On corner lots, the main entry should ideally be located on the *secondary street frontage*.
- Water tanks not permitted on roofs.



Sun shading devices are essential elements of a well designed home.



The main entry to the home should be clearly visible from the street and sheltered from the weather.

Principle 9

Privacy & Surveillance

Residential amenity is achieved in part by ensuring adequate privacy within the home while also providing opportunities for passive surveillance from those homes over the adjacent streets and public spaces.

Important Concepts

- Set back the upper level, most critically from the rear boundary, to minimise overlooking adjoining *private open space*.
- Locate windows, doors and decked areas to minimise overlooking adjoining *private open space*, particularly at the upper level.
- Consider screening to allow for both privacy and natural ventilation.
- Landscaping near lot boundaries can achieve additional privacy and shading.
- Provide a habitable room overlooking the street to provide passive surveillance. Where possible this should be a living room.
- Bedrooms and designated “home theatre” rooms do not generally provide opportunities for passive surveillance.

Guidelines

- Upper level openings on side facades which are less than 3m from a neighbouring house must be:
 - at least 1.7m above floor level OR
 - screened OR
 - fixed with translucent glazing.
- Habitable rooms overlooking the *private open space* of a neighbouring house are to have sill heights at least 1.7m above floor level.
- A habitable room should look over the street to provide passive surveillance.



Well designed screens can add to the aesthetic appeal of the home as well as improving privacy.



Passive surveillance of the street from the balconies and living spaces of homes is recognised as an important way of improving the safety of public areas.

Principle 10

Planning For All Ages

As people get older many want to stay living in their own homes and as part of the community they know, for as long as possible. To do this they need: independence and security; easy access around the house; a house designed to minimise the risk of trips and falls; and to avoid having to use stairs.

Thoughtful housing design can minimise or even prevent the need for expensive modifications as homeowners age. This may mean designing a single storey home or thoughtful planning, such as ensuring that the ground floor of a two-storey home always includes a bathroom and a space that can be used as a bedroom. Other features such as slightly wider corridors and larger bathrooms will also make life easier for homeowners in the years to come.

Landcom has prepared Universal Housing Guidelines (2008) (see References page 24 for details) to encourage the design of homes that meet these principal needs, to create and maintain strong and socially sustainable communities as the profile of our population changes over time. These guidelines are based on a review of the Australian Standards for Adaptable Housing and for Access and Mobility to identify those design features that we believe are critical to build in up-front (i.e. those things that cannot be changed later without major expense).



Single storey homes with level access can be enjoyed by residents through all their life stages.



Planning ahead when choosing a new house can ensure it is appropriate for the home-owners' future needs.



North facing verandahs can provide very enjoyable additional living spaces especially when they have a pleasant outlook.



Kitchens designed to Universal Housing standards will look like any other kitchen.

Principle 10

Planning For All Ages - continued

The Universal Housing Guidelines Key Design Features

The Universal Housing Guidelines identify key design features which relate primarily to spatial and structural requirements. They are:

1. Direct access - Direct and level access from the car parking space to the house.
2. Car parking - Car parking space at least 6.0m in length with potential for 3.8m in width (internal dimensions).
3. Front door - Front entrance with a minimum internal clearance of 850mm.
4. Internal doors - Internal entry level doorways with a minimum internal clearance of 820mm.
5. Corridors - Internal entry level corridors with a minimum width of 1000mm.
6. Ground floor facilities - Located on the ground/entry level – a living/family room; a room/space capable of being used as a bedroom; and a bathroom.
7. Living circulation - Living/family room with circulation space of at least 2.25m diameter (clear of furniture).
8. Bedroom dimensions - Bedroom space (on ground/entry level) large enough for a queen size bed, wardrobe and circulation space (i.e. 3.5 x 3.2m/3.7 x 3.0m).
9. Bathroom dimensions and features - Bathroom (on ground/entry level) minimum 2.4 x 2.4m, with hobless shower, full floor waterproofed and strengthened walls around the toilet and shower (at 700 – 1500mm and 700 – 1850mm above floor level respectively).
10. Kitchen dimensions - Kitchen with a minimum of 2.7m between walls.
11. Laundry circulation - Laundry with a minimum clear circulation space of 1.55m diameter.
12. Window heights - Window sills on the ground/entry level at a maximum height of 730mm above floor level (excluding the bathroom and kitchen).

Please refer to the Landcom Universal Housing Guideline (2008) for a more comprehensive explanation and description of this subject.



Open plan living areas can generally be more easily reorganised as needs change over time.



Design bathrooms so that accessible fittings can easily be added in the future if necessary.

appendix



Park Central

FOR LANDCOM PROJECTS

3.1 Design Guidelines Checklist

Key Principles

This list provides a summary of the guidelines for each of the 10 Principles. For more information and the background behind these guidelines see the relevant page as noted in the left hand column below.

PRINCIPLE	GUIDELINES SUMMARY	CONSIDERED
<p>PRINCIPLE 1: Streetscape, Landscape & Fences <i>(refer page 6)</i></p>	<ul style="list-style-type: none"> • Front fences and front side fences (to 2m behind the front facade) are to be: <ul style="list-style-type: none"> - 700 - 1200mm high - of 50% open appearance • Front gardens to include at least 2 'small' trees (5m to 8m high at maturity). • Rear gardens to include at least 1 'large' deciduous tree (8m to 15m at maturity). • Lots 12.5m wide or more are to have at least 2 'large' deciduous trees in the rear garden. 	
<p>PRINCIPLE 2: Garages & Driveways <i>(refer page 7)</i></p>	<ul style="list-style-type: none"> • Garage doors to be set back at least: <ul style="list-style-type: none"> - 1m from the front facade of the home - 5.5m from the front boundary. • Garage doors to be: <ul style="list-style-type: none"> - less than 50% of the width of the house - no wider than 6m - maximum 2.4m high. • Double garages are only permitted on lots 12.5m wide or greater. • Single fronted tandem garages with one space behind the other are permitted. • Triple garages are not permitted. • Garages on corner lots should be accessed from the secondary street. • Driveways to be a minimum of 1.5m from street trees. • Provide landscaping between the driveway and the side fence. 	
<p>PRINCIPLE 3: Building Setbacks <i>(refer page 8)</i></p>	<ul style="list-style-type: none"> • Front facade to be set back at least 4.5m from the front boundary. • Garage to be set back at least 1m from the front facade. • Lots 15m wide and over to have the upper floor set back at least 5.5m from the front boundary. • Upper floor side facades to be set back to achieve at least 2.4m between neighbouring houses at that upper level. • Set back house sufficiently from either the rear or side boundary to allow a 6m x 6m area for large trees. • Rear setback for the remainder of the lot to be at least 2m from the rear boundary at the ground floor and 6m from the rear boundary at the upper level. • Where permitted, buildings may be zero lotted on the ground floor along a side boundary for no more than 8m. • For corner lot homes: <ul style="list-style-type: none"> - address both street frontages - on the secondary street frontage, set back the house at least 3m from that boundary for a maximum length of 9m then at least 4m after that - set back the front facade at least 2m from any point on the splayed corner boundary. 	

PRINCIPLE	GUIDELINES SUMMARY	CONSIDERED
<p>PRINCIPLE 4: Site Coverage & Landscaped Area <i>(refer page 9)</i></p>	<ul style="list-style-type: none"> • Site coverage for two storey homes to be a maximum of 50% of the total lot area. • Site coverage for single storey homes to be a maximum of 60% of the total lot area. • Site coverage and the footprint of the house should allow for: <ul style="list-style-type: none"> - landscaped area which gives permeability of the soil to limit stormwater run-off - diversity of built form - privacy for both residents and their neighbours. • Bin storage and drying areas to be: <ul style="list-style-type: none"> - concealed from view from the street - considered carefully within the overall house and garden design - shown on the site plan 	
<p>PRINCIPLE 5: Solar Access & House Design <i>(refer page 10)</i></p>	<ul style="list-style-type: none"> • Main living area to open directly onto the private open space via glazed double doors. • The home is to be designed to have good natural cross ventilation. 	
<p>PRINCIPLE 6: Private Open Space <i>(refer page 11)</i></p>	<ul style="list-style-type: none"> • Principle private open space to be: <ul style="list-style-type: none"> - at least 4m x 6m - easily accessible from the main internal living area. • At least half of the principle private open space should receive 3 hours or more of sunlight between 9am – 3pm on June 21. 	
<p>PRINCIPLE 7: Secondary Facades & Fencing <i>(refer page 12 - 13)</i></p>	<ul style="list-style-type: none"> • Upper level walls longer than 10m to be stepped back a minimum of 1m. • Side and rear fences to be a maximum of 1.8m high. • Side fences to start at least 2m back from the front facade of the home, see Fig 7.1 pg 12. • Metal sheet fencing is not permitted except where required to address bushfire issues. • On corner lots the front fence should continue around the corner to the secondary street and along that street for a minimum of 30% of the lot length. • On corner lots the 1.8m fence on the secondary street to be: <ul style="list-style-type: none"> - a maximum of 50% of the lot length - of a similar look and character as the front fence. 	
<p>PRINCIPLE 8: House Form, Roofs & Feature Elements <i>(refer page 14 - 15)</i></p>	<ul style="list-style-type: none"> • Eaves of at least 450mm (to the fascia) required on all pitched roofs except where roof portion is zero lotted. • Where flat roofs are proposed, alternative shading devices are required. • Feature elements such as entries, verandahs and pergolas may extend beyond the front facade by a maximum of 2m. • Provide a covered entry to the home at least 1.5m deep and clearly visible from the street. • On corner lots, the main entry should ideally be located on the secondary street frontage. • Water tanks not permitted on roofs. 	

3.1 Design Guidelines Checklist

Key Principles - continued

PRINCIPLE	GUIDELINES SUMMARY	CONSIDERED
<p>PRINCIPLE 9: Privacy & Surveillance <i>(refer page 16)</i></p>	<ul style="list-style-type: none"> • Upper level openings on side facades which are less than 3m from a neighbouring house must be: <ul style="list-style-type: none"> - at least 1.7m above floor level OR - screened OR - fixed with translucent glazing. • Habitable rooms overlooking the private open space of a neighbouring house are to have sill heights at least 1.7m above floor level. • A habitable room should look over the street to provide passive surveillance. 	
<p>PRINCIPLE 10: Planning for all Ages <i>(refer page 17 - 18)</i></p>	<ul style="list-style-type: none"> • Direct and level access from the carparking space to the house. • Car parking space at least 6.0m in length with potential for 3.8m in width (internal dimensions). • Front entrance with a minimum internal clearance of 850mm. • Internal entry level doorways with a minimum internal clearance of 820mm. • Internal entry level corridors with a minimum width of 1000mm. • Located on the ground/entry level – a living/family room; a room/space capable of being used as a bedroom; and a bathroom. • Living/family room with circulation space of at least 2.25m diameter (clear of furniture). • Bedroom space (on ground/entry level) large enough for a queen size bed, wardrobe and circulation space (i.e. 3.5 x 3.2m/3.7 x 3.0m). • Bathroom (on ground/entry level) minimum 2.4 x 2.4m, with hobless shower, full floor waterproofed and strengthened walls around the toilet and shower (at 700 – 1500mm and 700 – 1850 mm above floor level respectively). • Kitchen with a minimum of 2.7m between walls. • Laundry with a minimum clear circulation space of 1.55m diameter. • Window sills on the ground/entry level at a maximum height of 730mm above floor level (excluding the bathroom and kitchen). 	
<p>CORNER LOTS: Summary of Guidelines</p>	<ul style="list-style-type: none"> • Corner lot homes must address both street frontages. • The main entry should ideally be located on the longer secondary street frontage. • Garages should also be accessed from the secondary street and may be located on that boundary. • On the secondary street frontage the home is to be set back at least 3m from that boundary for a maximum length of 9m then by at least 4 m after that. • The front facade is to be set back at least 2m from the splayed corner boundary. • The front fence is to continue around the corner to the secondary street and along that frontage for a minimum of 30% of the lot length. • The 1.8m side fence on the secondary street is to be a maximum of 50% of the lot length and of a similar look and character as the front fence. 	

3.2 Glossary

FRONT FACADE

Refers to the front of the building facing the street excluding articulation and details such as entry porticos and verandahs.

HABITABLE ROOM

Refers to any room or area used for normal domestic activities, including living, dining, family, lounge, bedrooms, kitchen etc, but excludes service and amenity areas such as ensuite, bathroom, storerooms, laundry and garages.

LANDSCAPED AREA

Refers to any part of the site, at ground level, that is permeable and consists of soft landscaping, turf or planted areas, for the purpose of reducing stormwater run-off. It excludes driveways, parking areas, drying yards or other service areas, undercrofts, roofed areas (excluding eaves <450mm wide), outdoor rooms, balconies, terraces, decks and verandahs.

PRINCIPLE PRIVATE OPEN SPACE

Refers to a portion of the private open space that is easily accessible to the main internal living area of the home.

PRIVATE OPEN SPACE

Refers to the areas external to a building, located behind the front facade, that serve as an extension of the home and are used for private dining, entertaining and recreational purposes and includes terraces, balconies, alfresco areas.

SECONDARY STREET FRONTAGE

Refers to the building facade which addresses the longer street frontage of a corner lot.

SITE COVERAGE

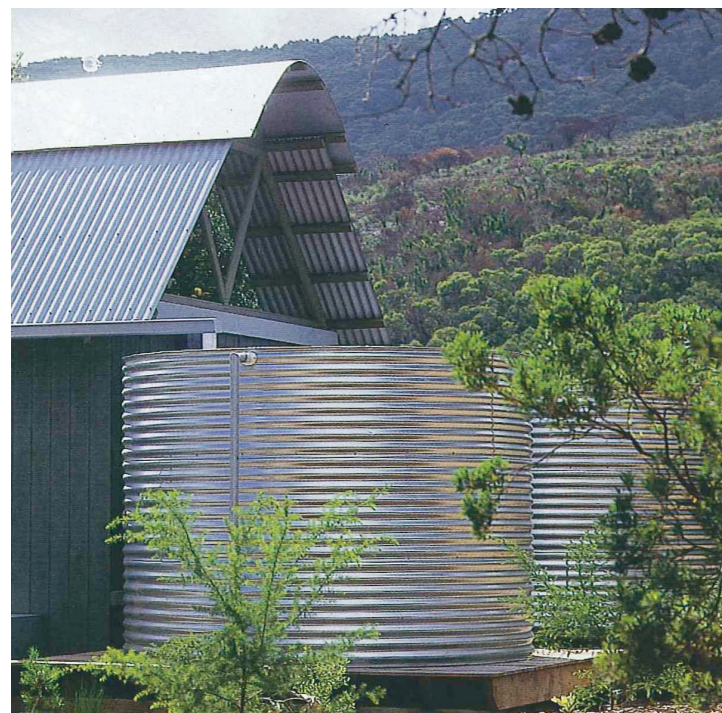
Refers to the percentage of land enclosed by external walls in relation to site area of an allotment, and does not include articulation elements, porch/balconies/terraces, outdoor and alfresco rooms. It also does not include paved areas including driveways and paths.

ZERO LOTTING

Refers to the external wall of dwellings being built on the boundary of the lot. These guidelines only permit zero lotting on the ground floor of dwellings.



Well connected indoor and outdoor living spaces can add to the overall amenity of the home.



Water tanks can be designed as an integral feature of the overall house and garden design.

references

A number of references have been sourced for the preparation of this document. These may assist designers and project managers to gain a greater understanding of the issues and principles of these guidelines.

Urban Design Guidelines Report

English Partners

www.englishpartnerships.co.uk

NSW Government Metropolitan Strategy

Housing Strategy for Sydney

Guidelines for Higher Density Residential Development

Victorian Department of Sustainability and Environment

Liveable Neighbourhoods Edition 3 (2004)

WA Planning Commission

Universal Housing Guidelines (2008)

Landcom

www.landcom.com.au



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